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ABSTRACT

An object of the present invention is to lower the power dissipation of the image rejection mixer. The image rejection mixer includes distribution means supplied with local signals having a phase difference to distribute the local signals, first and second mixing means for mixing the distributed local signals and RF signals having a phase difference and outputting respective IF current signals, phase shift means for shifting in phase the respective mixed IF current signals so as to provide them with a relative phase difference of 90 degrees, and addition means for adding the respective phase shifted intermediate frequency current signals. The phase shift means shifts the phases of the respective IF current signals outputted from the first and second mixing means.